Picaridin Mosquito Repellent

(General Fact Sheet)

Picaridin is an effective alternative to DEET that provides long lasting protection. It forms a barrier on the skin, blocking the mosquito's ability to locate you. Picaridin is odorless and can be used by all ages.

Picaridin is also known as KBR3023, or Bayrepel®. It has been used worldwide since 1998, and is widely used in Europe and Australia. It is recommended by the World Health Organization as protection against malaria carrying mosquitoes.

Chemical formula $C_{12}H_{23}NO_3$
Chemical Name: 1-Piperidinecarboxylic acid, 2-(2-hydroxyethyl)-, 1-methylpropylester
Commercial Name: Bayrepel®, KBR 3023
Common name: Picaridin
Form: liquid, clear
Solidifying point: < -170° C
Viscosity: 30.7 sec. flow time according to DIN 53211
Initial boiling point: 296° C at 1013 hPA
Vapor pressure: 3.4 x 10 exp - 4hPa at 20°C ; 5.9 x 10 exp - 4hPa at 25°C: 7.1 x 10 exp - 3hPa at 50°C
Irritation: non-irritant
Color: Colorless - brownish
Odor: Nearly odorless

Evaluation: Picaridin was tested against mosquitoes, flies and ticks in both field studies and in laboratory cage tests. Against certain strains of mosquitoes, Picaridin provides equal or longer protection than identical concentrations of DEET. Efficacy against ticks has been demonstrated in laboratory cage tests. Picaridin is nearly odorless and does not cause skin irritations. Picaridin has no adverse affect on plastics, synthetics, plastic coatings and sealants.

References

www.picaridin.com

A.B. Astroff, A.D. Young, B. Holzum 2, G.K. Sangha, J.H. Thyssen. 2000. Conduct and interpretation of a dermal developmental toxicity study with KBR 3023 (a prospective insect repellent) in the Sprague-Dawley rat and Himalayan rabbit. Teratology 61:222-230.

www.bayrepel.com/bre/en/products/bayrepel/

www.cdc.gov/ncidod/dvbid/westnile/RepellentUpdates.htm